

**AMENDMENTS TO THE SPECIFICATION:**

The following amendments to the specification are indicated using the paragraph numbers of the Published Patent Application for the above-referenced case, Publication No. US 2005/0044099.

Please delete the “SUMMARY OF THE INVENTION” section title and paragraph [0023]:

**SUMMARY OF THE INVENTION**

[0023] ~~The genus of the invention is defined by any computer implemented process which can assist an IT professional to establish and IT services catalog by: (1) providing some computer displayed means by which the IT professional can choose between multiple processes including defining a new service, defining a relationship between a service and another service or IT resource, defining cost information or defining a service action which, when executed, can create, modify or destroy an instance of the service; (2) when the user chooses to define a new service, interacting with the user in any way to create a data structure which defines the service and which includes validation constraints and/or validation formulas; (3) when the user chooses to define a relationship, interacting with the user in any way to determine whether the relationship is to other IT services or to IT resources and to establish filter conditions within the selected class and to record appropriate pointers and filter conditions in the data structure which defines the service; (4) if the user chooses to define cost information, interacting with the user in any way allow the user to enter and store cost formulas in the data structure defining a service; and (5) if the user chooses to define a service action, interacting in any way with the user to solicit and store data which completes a data structure which defines the service action.~~

Please add the “SUMMARY OF THE INVENTION” section title and the following new paragraph [0015.1] after paragraph [0015] and before the “BRIEF DESCRIPTION OF THE DRAWINGS” section:

## SUMMARY OF THE INVENTION

[0015.1] The genus of the invention is defined by any computer implemented process which can assist an IT professional to establish and IT services catalog by: (1) providing some computer displayed means by which the IT professional can choose between multiple processes including defining a new service, defining a relationship between a service and another service or IT resource, defining cost information or defining a service action which, when executed, can create, modify or destroy an instance of the service; (2) when the user chooses to define a new service, interacting with the user in any way to create a data structure which defines the service and which includes validation constraints and/or validation formulas; (3) when the user chooses to define a relationship, interacting with the user in any way to determine whether the relationship is to other IT services or to IT resources and to establish filter conditions within the selected class and to record appropriate pointers and filter conditions in the data structure which defines the service; (4) if the user chooses to define cost information, interacting with the user in any way allow the user to enter and store cost formulas in the data structure defining a service; and (5) if the user chooses to define a service action, interacting in any way with the user to solicit and store data which completes a data structure which defines the service action.

Please add the following new paragraph at the end of the “BRIEF DESCRIPTION OF THE DRAWINGS” section, after paragraph [0022]:

[0022.1] FIG. 8, comprised of FIGS. 8A and 8B, is a flowchart of the threshold approval process to obtain management approval to bring an instance of a service into existence followed by the fulfillment process to actually bring an instance of a service into existence.

Please replace paragraph [0003] with the following amended paragraph:

[0003] Application services include: providing financial, enterprise resource planning (ERP), and customer relationship management (CRM) applications, providing decision support, designing custom web applications, application configuration, output management, job scheduling, application support, application tuning, application upgrades and application training.

Please replace paragraph [0005] with the following amended paragraph:

[0005] Computing and storage services include: providing application program servers that users can log onto and run application programs on across the local area network, providing database servers, providing direct access storage device (DASD) and network-attached storage (NAS) storage, backing up data, providing clustered server configurations, providing internal servers, application monitoring, system monitoring and storage redundancy.

Please replace paragraph [0006] with the following amended paragraph:

[0006] Network and security services include: providing wide area network (WAN) routers, providing campus routers and core switches, providing local area network (LAN) switches and firewalls, providing domain name system (DNS) servers and directory servers, providing intrusion detection, providing virtual local area network/remote access server (VLAN/RAS) services, providing authentication services, providing internet service provider (ISP) access and bandwidth to end users who need to transmit and receive data to and from outside and in-house servers.

Please replace paragraph [0018] with the following amended paragraph:

[0018] FIG. 3, comprised of FIGS. 3A through [[3B]] 3D, there is shown a flowchart of the process a computer implements to interact with an IT professional to define the services in an IT catalog.

Please replace paragraph [0038] with the following amended paragraph:

[0038] Test 70 causes branching to the appropriate steps based upon whether the request was to establish a new service or change an existing service. If a new service has been requested, this means that a completely new data structure is to be created which defines an instantiation of this new service. Processing then proceeds to test 71 which determines from the user password and user name if the user who logged in has the skills to define IT services at a low level. If so, then processing proceeds to step 72 and following to be described below. If the user is one who needs the assistance of templates and stencils, then processing proceeds to step 73. It is possible in the preferred embodiment to define IT services, service actions, relationships between services or between service actions using predefined primitives which are also referred to herein as stencils or templates. These predefined templates are aggregations of lower level services, service action, approval workflow tasks and fulfillment workflow tasks which have been previously defined by an IT professional with a higher level of skill and which are commonly used in definitions of services, service action and relationships. These templates can be used to save great amounts of time in defining IT services since they are building blocks like lego that a user may use to rapidly construct more complex services, service actions or relationships therebetween without being bothered by the myriad of details of defining the data structures of the building blocks themselves.

Please replace paragraph [0039] with the following amended paragraph:

[0039] The building blocks include organizational standards on the types of resources each service can use. For example, it might be that an organization has decided that all email servers will be [[Dell]] DELL™ servers. These types of standards are built into the building blocks when they are defined so that any service built from an aggregation of building blocks will automatically conform to the organization standards as to which types of resources to use.

Please replace paragraph [0054] with the following amended paragraph:

[0054] Returning to the consideration of step 70, if the user did not indicate that a new service was to be defined, processing proceeds to step 80 which is a test to determine if the user has indicated that the service is to have a relationship with a pre-existing service. Most IT services

catalogs have services which are arranged in a hierarchy. There is usually a core services catalog which is predefined and does not to be defined by the IT professional at design time. The core services are IT services which everybody frequently uses. They are like templates or predefined macros in a word processor and function as building blocks which can be "consumed", i.e. performed as part of a higher order service in the hierarchy. The service actions to be described below which are executed to create, modify and destroy instances of services also are arranged in hierarchies which are established by pointers in the data structures of the service actions. The same is true for resources: they are arranged in a hierarchy defined by pointers in the data structures of the resources. The data structures of the resources define the attributes thereof.

Please replace paragraph [0059] with the following amended paragraph:

[0059] Next, step 86 is performed where user input is received which defines the constraints that the particular resource or service can point to within a defined type. These additional constraints are filters on the particular members of the class defined by the constraints entered in step 82 which are eligible to be pointed to by the pointer. In other words, if the class constraint defined in step 80 is IT resource "computers", the constraint entered in step 86 may be to restrict the pointer to only point to computers with more than 80 gigabytes of disk storage. These constraints can be used to enforce enterprise standards of preferred vendors for particular types of equipment or preferred models of equipment from a particular vendor. Thus, the service can be defined as requiring, for example, that an email server be a [[Dell]] DELL™ server, model 2500.

Please replace paragraph [0062] with the following amended paragraph:

[0062] Next, step [[94]] 93 is performed to display a dialog that requests the user to enter a cost formula and receive and store user input that defines the cost formula. The formula can have as its variables any defined field in any data structure defining an instance of any service. Step [[96]] 95 ends the cost formula entry process and waits for selection of another icon.

Please replace paragraph [0072] with the following amended paragraph:

[0072] After completion of step 106, or completion of the IT service catalog, it is time to decide whether to create a service advisor in the form of a decision tree which will help the user who does not understand IT speak to specify the desired IT service. The user can specify whether to create a service advisor by launching a tool to create service advisors, ~~and this process is represented by step 107 in FIG. 3E. If the user chooses to not create a service advisor, the process ends as symbolized by step 109.~~

Please replace paragraph [0073] with the following amended paragraph:

[0073] If the user chooses to create a service advisor, a loop is entered where the user specifies a series of questions in three or more categories and specifies branching conditions based upon anticipated answers and specifies recommended IT services so as to define the decision tree discussed elsewhere herein. The basic categories of questions that must be defined are: size (how many users the requested IT service must support); cost; service level agreement (how reliable does the IT service requested need to be in terms of up time or response time to the user). After each question is defined by entering the question in a dialog box or by any means of interacting with the computer, the user is asked whether he wants to define another question. During the process of defining the questions, the IT professional also specifies other questions to branch to based upon various scenarios of anticipated user answers or specifies particular recommendations of an IT service or collection of IT services appropriate to the user's original request based upon the user's possible answers to the question. The series of questions and branching conditions based upon anticipated answers essentially records the knowledge of the IT professional in what types of IT services are available and how they should be specified. The questions defined are such that the answers can be used to populate the fields of the data structure(s) of the service actions in the IT services catalog. When the IT services catalog is defined by the process of FIGS. 3A-3D, all that is created is a series of data structures with fields which have defined semantics and with pointers to various workflows and to establish service action hierarchies, but the fields are empty (except for fields that have pointers). The contents of these fields in the IT services catalog are what define the type of a service and how to create, modify and delete an instance of the service by associated service actions. The advisor tool ~~represented by FIG. 3E~~ is a tool which

is used to define wizards that are used at configuration time to help fill in the fields of the data structures in the IT services catalog to specify the desired IT service properly in IT speak.

Please replace paragraph [0077] with the following amended paragraph:

[0077] FIG. 6 is a diagram showing how an IT solution configurator process 108 is used to receive requests from end users for new IT services or to change existing IT services and how the configurator interacts with the IT service catalog 99 and provides project/service fulfillment information, solution costs and delivery and quality metrics. The fulfillment information is a h[[e]]ierarchy of Requests For Services (RFS). RFSs 109 are forms output by the configuration process to specify which services are to be implemented and how. Each RFS 109 typically includes a bill of materials 110, workflows 112 and estimated costs and estimated completion schedule. The bill of materials is written based upon the statements made in the fulfillment workflows where the resources needed to accomplish each step are reserved by the IT professional who knows what resources will be consumed by each step. The h[[e]]ierarchy of RFSs 109 are for the whole job and any sub-jobs that need to be performed. The solution costs are divided into non recurring costs 114 and recurring costs 116 for development, deployment and maintenance of the requested IT services. The delivery and quality metrics are six sigma and other project governance and delivery metrics.

Please replace paragraph [0132] with the following amended paragraph:

[0132] Service actions are frequently arranged in h[[e]]ierarchical fashion, and creation, modification or deletion of a service is accomplished as a series of fulfillment workflows, each associated with one of the service actions in the h[[e]]ierarchy. After step 171 is accomplished, it is desirable to determine whether the fulfillment workflow just completed is the last one in the chain that needs to be completed. Step 173 determines if the fulfillment workflow just completed is the last one in the h[[e]]ierarchy by looking for pointers to a parent service action in the data structure of the service action whose fulfillment workflow was just completed. If there are no pointers to a parent, then processing proceeds to step [[172]] 177 and the fulfillment process is done. If there is a pointer to a parent service action, that pointer is followed to the data structure

of the parent service action and a pointer in the parent service action data structure to the fulfillment workflow of the parent service action is followed in step 175. Processing then proceeds to step 166 to load that fulfillment workflow into memory and the processing to execute the new fulfillment workflow is repeated.